

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD

JOHN AUERBACH COMMISSIONER

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health

William A. Hinton State Laboratory Institute 305 South Street, Jamaica Plain, MA 02130

01/03/2011

Adam Foss Assistant District Attorney, Suffolk County

Dear ADA Foss,

Enclosed is the information you requested in regards to Commonwealth vs. are copies of the following:



Included

- 1. Drug Analysis Laboratory Receipt.
- 2. Curriculum Vitae for Annie Dookhan & Peter Piro.
- 3. Control Cards with analytical results for samples #



- 4. Analysis sheets with chemist's hand notations and test results.
- 5. GC/Mass Spectral analytical data for samples #



I, Annie Dookhan, was the custodial chemist and performed the preliminary testing and net weight for this sample. Peter Piro was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely

Annie Khan (Dookhan)

Chemist II

Drug Analysis Lab

Jamaica Plain, MA. 02130

(617) 983-6631

Annie.Khan@state.ma.us



| CC # | | | ***** | |
|--------|-----|----|-------|------|
| воок#_ | 149 | -4 | | |
| PAGE # | 138 | | | |
| | | | | |

| DDIIC DECEIDT | PAGE # 138 | | | | | |
|---------------------------------------|---|--|--|--|--|--|
| DRUG RECEIPT | DESTRUCTION # | (AW to 1) | | | | |
| DKc2< | | | The second secon | | | |
| District/Unit | 5 3 Milachell | ID# \\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 73 | | | |
| DEFENDANT'S NAME | ADDRESS | CITY | STATE | | | |
| | | Borjov | MA | | | |
| | | | SE ONLY | | | |
| DESCRIPTION OF ITEMS SUBMITTED | GROSS QUANTITY | GROSS WEIGHT | ANALYSIS NUMBER | | | |
| icack - Colone | 1 913 | | | | | |
| | *************************************** | 19 pm | | | | |
| | Δ' | 11000 | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | 5 | | | |
| | | | | | | |
| | | | 00.00000000000000000000000000000000000 | | | |
| To be completed by ECU personnel only | | | | | | |
| vame and Rank of Submitting Officer | I Whik | ID#// <i>E</i> | 764 | | | |
| IV / /) | | ID#// | 2.10 | | | |
| Received by | | Date | | | | |
| PD Form 0038-BIS-0907 (prev. †753) | 1 | LOO COMION# | ÷ 17 18 18 19 19 19 19 19 19 19 19 19 19 19 19 19 | | | |

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry. University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 - present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.
- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, January 2004.
- *Responsible for the identification of drugs to determine violations of harmful and narcotic drug laws.
- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.
- *Maintenance and repairs of all analytical instruments.
- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.
- * Responsible for the Quality Control/Quality Assurance program for the drug lab.
- *Notary Public.
- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 - 2003

OC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.
- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.
- *Writing, revising and reviewing Standard Operating Procedures (SOPs).
- *Routine QC testing of products for the FDA.
- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.
- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.
- *Complete testing of chemicals for Vendor Validation Project for the FDA.
- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice - Forensics Professionals.

GLP/GMP course with Massachusetts Biologic Laboratory.

OC/OA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Peter Piro

EDUCATION

Boston Unversity
B.A. in Chemistry and Minor in Biology, 1989
HONORS
Magna Cum Laude, 3.6 GPA

Graduated with Distinction in Chemistry Valedictorian of the Chemistry Department

EXPERIENCE

Department of Public Health/State Laboratory Institute

Laboratory Supervisor I/Chemist III, II, II/ Assistant Analyst

December 1991-Present Supervise the operation and maintenance of the Gas Chromatography/Mass Spectrometry Laboratory. Train staff and coordinate schedules. Analyze controlled substances for State and Federal law enforcement agencies. Develop, oversee, and make improvements to the GC/MS laboratory's quality assurance/quality control (QA/QC) program. Serve as the Technical Supervisor of the Drug Analysis Laboratory. Responsible for planning and implementing Quality Improvement (QI) projects. Make recommendations for protocols and procedures by developing methods so work can be performed in an accurate and efficient manner. Qualified as an expert witness in Massachusetts courts and U.S. District Court.

Massachusetts Health Research Institute

Laboratory Technician September 1990-December 1991 Researched the seasonal and special occurrences of DSP and PSP in shellfish samples harvested from coastal waters and Georges Bank using cELISA and bioassays.

TRAINING AND ORGANIZATIONS

- * Completed a six-week training course by senior staff within the Department of Public Health Drug Analysis laboratory.
- * Appointed Assistant Analyst by the Assistant Commissioner of Public Health in February 1991.
- * Elected as a Regular Member to the Northeastern Association of Forensic Chemists on October 27th 1995 and a member of the Massachusetts Organization of State Engineers and Scientists.
- * Completed training in Mass Spectrometry given by the Food and Drug Administration/Forensic Chemistry Center on November 2002.
- * Completed training in Mass Spectrometry Troubleshooting and Maintenance, October 25th 2002, at Agilent Technologies.* Notary Public since 1993.

Date Analyzed: //- 8-40 No.

City: Boston D.C.U. Police Dept.

Officer: P.O. SYBIL WHITE

Def:

Amount:

Subst: SUB

No. Cont:

Cont: pb

Date Rec'd: 08/13/2010

No. Analyzed:

Gross Wt.: 2.19

Net Weight: 0.16

Tests:

6 AX

Prelim: Ocaro

Findings: Cocacine

DRUG POWDER ANALYSIS FORM

| SAMPLE # No. of samples tested: | | BOEN | | ANALYST_ | ASO |
|---|---------|--------|----------------------------|-----------------------|--------|
| PHYSICAL DESCRIPTION: | arm sus | 1401 C | | Wt ():_ Pkg. Wt:_ | 0.2166 |
| PRELIMINARY TESTS Spot Tests Cobalt Thiocyanate (—) — Marquis Froehde's Mecke's | | | Gold Chloride TLTA_(| stalline Tes | |
| PRELIMINARY TEST RESULTS RESULTS CO COLOR DATE 11-4-10 | | RE | MS RATOR | COCCU PJP | |

File Name : C:\msdchem\1\System7\11_05_10\753248.D

Operator : P. PIRO

Date Acquired : 5 Nov 2010 23:18

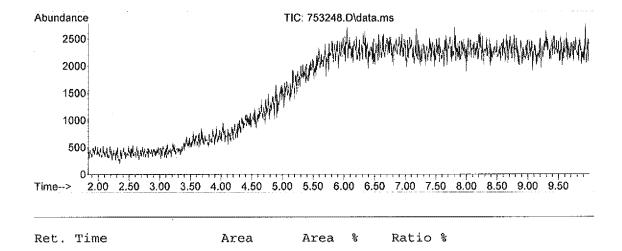
Sample Name : BLANK

Submitted by

Vial Number

Integrator : RTE

AcquisitionMeth: DRUGS.M



^{***}NO INTEGRATED PEAKS***

File Name : C:\msdchem\1\System7\11_05_10\753249.D

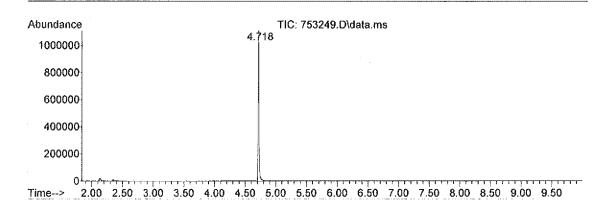
Operator : P. PIRO

Date Acquired : 5 Nov 2010 23:31 Sample Name : COCAINE STANDARD

Submitted by :

Vial Number : 6

AcquisitionMeth: DRUGS.M Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.718 | 1083626 | 100.00 | 100.00 |

File Name : C:\msdchem\1\System7\11_05_10\753249.D

Operator : P. PIRO

Date Acquired 5 Nov 2010 23:31 Sample Name COCAINE STANDARD

Submitted by

Vial Number 6

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2,L

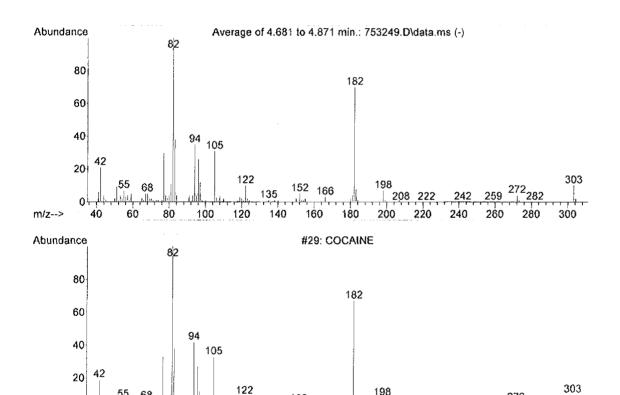
PK# RT Library/ID CAS# Qual

4.72 C:\Database\SLI.L 1

COCAINE

000050-36-2

99



152 166

160

180

198

200

214

220

244

240

259

260

280

300

m/z-->

55 68

60

80

100

40

135

140

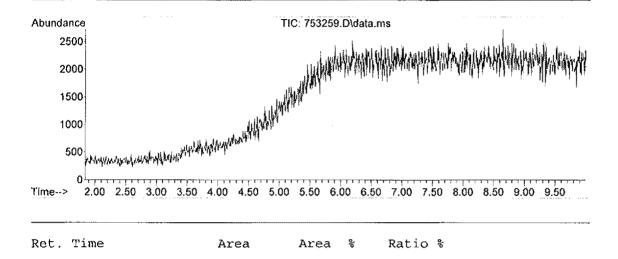
120

File Name : C:\msdchem\1\System7\11 05 10\753259.D

Operator : P. PIRO

Date Acquired : 6 Nov 2010 1:37

Sample Name : BLANK
Submitted by : ASD
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



NO INTEGRATED PEAKS

File Name : C:\msdchem\1\System7\11_05_10\753260.D

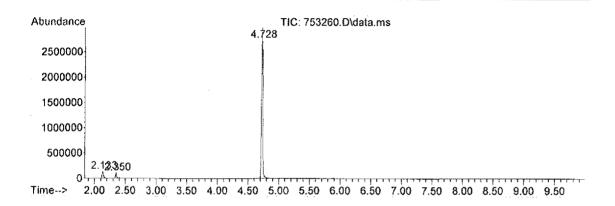
Operator : P. PIRO

Date Acquired : 6 Nov 2010 1:50

Sample Name Submitted by

ASD 60

Vial Number AcquisitionMeth: DRUGS.M Integrator : RTE



| Ret. Time | Area | Area % | Ratio % | |
|-----------|---------|--------|---------|--|
| 2.133 | 192135 | 4.38 | 4.71 | |
| 2.350 | 119153 | 2.71 | 2.92 | |
| 4.728 | 4079543 | 92.91 | 100.00 | |
| | • | | | |

File Name : C:\msdchem\1\System7\11 05 10\753260.D

Operator : P. PIRO

Date Acquired : 6 Nov 2010 1:50

Sample Name : Submitted by :

ASD 60

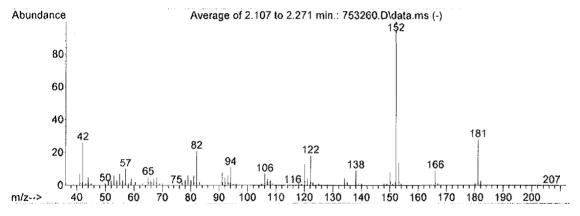
Vial Number : 60 AcquisitionMeth: DRUGS.M Integrator : RTE

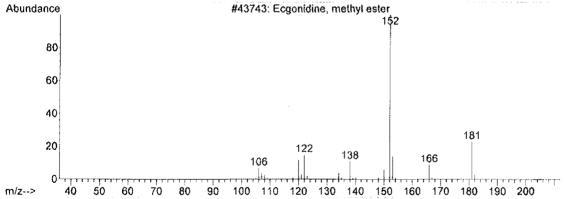
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW_TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-------|------|-------------------------------------|-------------|---|
| 1 | 2.13 | C:\Database\NIST05a.L | | *************************************** |
| | | Ecgonidine, methyl ester | 127379-24-2 | 98 |
| | | 2-Carbomethoxy-8-methyl-8-azabicycl | 043021-26-7 | 96 |
| | | 2(1H)-Pyridinone, 4-hydroxy-6-methy | 007135-82-2 | 3.8 |





File Name : C:\msdchem\1\System7\11_05_10\753260.D

Operator : P. PIRO

Date Acquired : 6 Nov 2010 1:50

Sample Name : Submitted by :

ASD 60

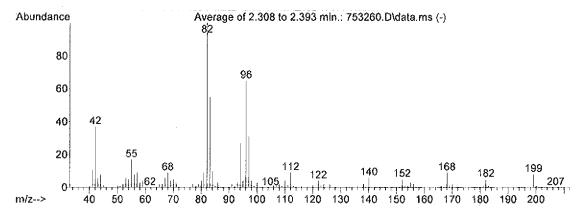
Vial Number : 60 AcquisitionMeth: DRUGS.M Integrator : RTE

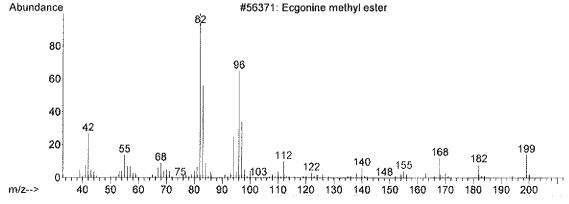
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW TOX2.L

| PK# | RT | Library/ID | CAS# | Qual |
|-----|------|--|---|----------------|
| 2 | 2.35 | C:\Database\NIST05a.L Ecgonine methyl ester Ecgonine methyl ester Ecgonine methyl ester | 106293-60-1 106293-60-1 106293-60-1 | 97 97 97 |





: C:\msdchem\1\System7\11 05 10\753260.D File Name

Operator : P. PIRO

Date Acquired 6 Nov 2010 1:50

Sample Name

Submitted by ASD Vial Number 60 AcquisitionMeth: DRUGS.M Integrator RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 80

C:\Database\NIST05a.L

C:\Database\PMW_TOX2.L

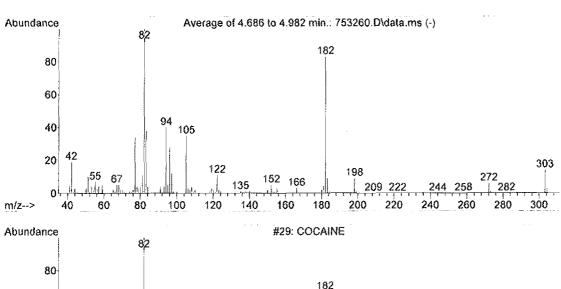
PK# RT Library/ID CAS# Qual

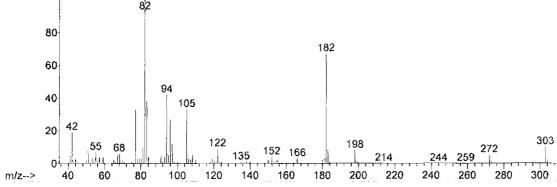
3 4.73 C:\Database\SLI.L

COCAINE

000050-36-2

99





File Name : C:\msdchem\1\System7\11_05_10\753270.D

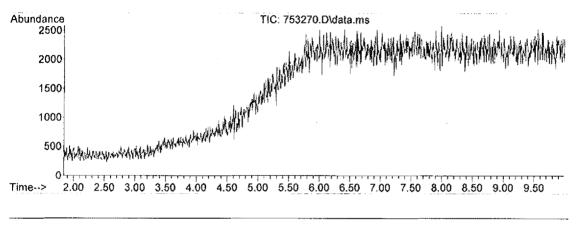
Operator : P. PIRO

Date Acquired : 6 Nov 2010 3:56

Sample Name : BLANK

Submitted by

Vial Number : 2 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time

Area

Area %

Ratio %

NO INTEGRATED PEAKS

File Name : C:\msdchem\1\System7\11_05_10\753271.D

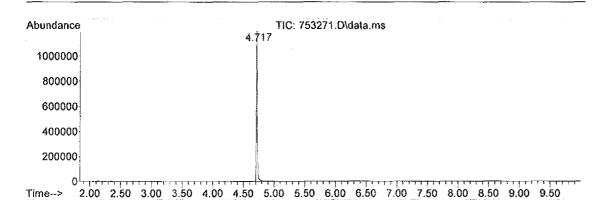
Operator : P. PIRO

Date Acquired : 6 Nov 2010 4:09 Sample Name : COCAINE STANDARD

Submitted by

Vial Number : 6

AcquisitionMeth: DRUGS.M Integrator : RTE



| Ret. Time | Area | Area % | Ratio % |
|-----------|---------|--------|---------|
| 4.717 | 1190332 | 100.00 | 100.00 |

File Name : C:\msdchem\1\System7\11_05_10\753271.D

Operator P. PIRO

Date Acquired 6 Nov 2010 4:09 Sample Name COCAINE STANDARD

Submitted by

Vial Number 6 AcquisitionMeth: DRUGS.M

Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 80

C:\Database\PMW_TOX2.L

PK# RTLibrary/ID CAS# Qual

4.72 C:\Database\SLI.L 1

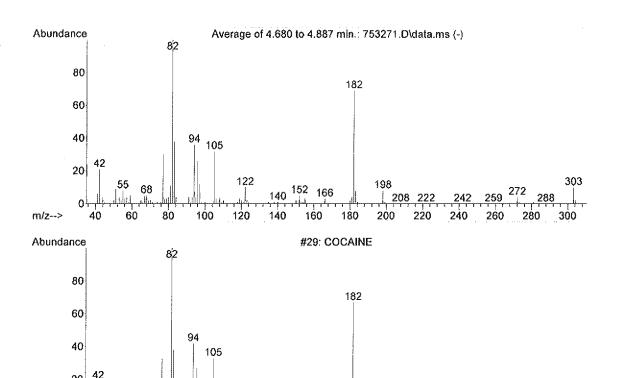
COCAINE

000050-36-2

99

303

300



152 166

160

180

198

200

214

220

20

Λì

40

m/z-->

55 68

60

80

100

122

120

135

259

260

280

244

240